

The demand must be filed directly with the competent International Preliminary Examining Authority or, if two or more Authorities are competent, with the one chosen by the applicant. The full name or two-letter code of that Authority may be indicated by the applicant on the line below:

IPEA/ \_\_\_\_\_

**PCT**

**CHAPTER II**

**DEMAND**

under Article 31 of the Patent Cooperation Treaty:

The undersigned requests that the international application specified below be the subject of international preliminary examination according to the Patent Cooperation Treaty.



For International Preliminary Examining Authority use only

Identification of IPEA		Date of receipt of DEMAND	
<b>Box No. I IDENTIFICATION OF THE INTERNATIONAL APPLICATION</b>		Applicant's or agent's file reference 04-007PC	
International application No. PCT/JP2004/018109	International filing date (day/month/year) 30.11.2004	(Earliest) Priority date (day/month/year) 02.12.2003	
Title of invention METHOD FOR PRODUCING HELICAL SYNCHRONOUS BELT, AND HELICAL SYNCHRONOUS BELT PRODUCED BY SAME			
<b>Box No. II APPLICANT(S)</b>			
Name and address: (Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country.) BANDO CHEMICAL INDUSTRIES, LTD. 2-15, Meiwa-dori 3-chome Hyogo-ku, Kobe-shi, Hyogo 652-0883 JAPAN		Telephone No. 81-78-651-6691	
		Facsimile No. 81-78-651-8979	
		Teleprinter No.	
		Applicant's registration No. with the Office	
State (that is, country) of nationality: JAPAN		State (that is, country) of residence: JAPAN	
Name and address: (Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country.) MATSUDA Kiyotaka c/o BANDO CHEMICAL INDUSTRIES, LTD., 2-15, Meiwa-dori 3-chome Hyogo-ku, Kobe-shi, Hyogo 652-0883 JAPAN			
State (that is, country) of nationality: JAPAN		State (that is, country) of residence: JAPAN	
Name and address: (Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country.) OTA Takeshi c/o BANDO CHEMICAL INDUSTRIES, LTD., 2-15, Meiwa-dori 3-chome Hyogo-ku, Kobe-shi, Hyogo 652-0883 JAPAN			
State (that is, country) of nationality: JAPAN		State (that is, country) of residence: JAPAN	
<input type="checkbox"/> Further applicants are indicated on a continuation sheet.			

**Box No. III AGENT OR COMMON REPRESENTATIVE; OR ADDRESS FOR CORRESPONDENCE**The following person is ☒ agent ☐ common representativeand ☒ has been appointed earlier and represents the applicant(s) also for international preliminary examination.☐ is hereby appointed and any earlier appointment of (an) agent(s)/common representative is hereby revoked.☐ is hereby appointed, specifically for the procedure before the International Preliminary Examining Authority, in addition to the agent(s)/common representative appointed earlier.Name and address: *(Family name followed by given name; for a legal entity, full official designation.  
The address must include postal code and name of country.)*KODAMA Yoshihiro  
HASEBE Zentaro  
Enju-Ochanomizu Bldg. 3F., 17-2, Sotokanda 2-chome,  
Chiyoda-ku, Tokyo 101-0021 Japan

Telephone No.

81-3-3251-3951

Facsimile No.

81-3-5298-6247

Teleprinter No.

Agent's registration No. with the Office

☐ **Address for correspondence:** Mark this check-box where no agent or common representative is/has been appointed and the space above is used instead to indicate a special address to which correspondence should be sent.**Box No. IV BASIS FOR INTERNATIONAL PRELIMINARY EXAMINATION****Statement concerning amendments:\***

1. The applicant wishes the international preliminary examination to start on the basis of:

☒ the international application as originally filedthe description ☐ as originally filed☐ as amended under Article 34the claims ☐ as originally filed☐ as amended under Article 19 (together with any accompanying statement)☐ as amended under Article 34the drawings ☐ as originally filed☐ as amended under Article 342. ☐ The applicant wishes any amendment to the claims under Article 19 to be considered as reversed.3. ☐ Where the IPEA wishes to start the international preliminary examination at the same time as the international search in accordance with Rule 69.1(b), the applicant requests the IPEA to **postpone** the start of the international preliminary examination until the expiration of the applicable time limit under Rule 69.1(d).4. ☐ The applicant expressly wishes the international preliminary examination to **start earlier** than at the expiration of the applicable time limit under Rule 54bis.1(a).

\* Where no check-box is marked, international preliminary examination will start on the basis of the international application as originally filed or, where a copy of amendments to the claims under Article 19 and/or amendments of the international application under Article 34 are received by the International Preliminary Examining Authority before it has begun to draw up a written opinion or the international preliminary examination report, as so amended.

Language for the purposes of international preliminary examination: **ENGLISH** .....☒ which is the language in which the international application was filed.☐ which is the language of a translation furnished for the purposes of international search.☐ which is the language of publication of the international application.☐ which is the language of the translation (to be) furnished for the purposes of international preliminary examination.**Box No. V ELECTION OF STATES**

The filing of this demand constitutes the election of all Contracting States which are designated and are bound by Chapter II of the PCT.

**Box No. VI CHECK LIST**

The demand is accompanied by the following elements, in the language referred to in Box No. IV, for the purposes of international preliminary examination:

- |                                                                          |   |        |
|--------------------------------------------------------------------------|---|--------|
| 1. translation of international application                              | : | sheets |
| 2. amendments under Article 34                                           | : | sheets |
| 3. copy (or, where required, translation) of amendments under Article 19 | : | sheets |
| 4. copy (or, where required, translation) of statement under Article 19  | : | sheets |
| 5. letter                                                                | : | sheets |
| 6. other ( <i>specify</i> )                                              | : | sheets |

For International Preliminary Examining Authority use only

received	not received
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<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>

The demand is also accompanied by the item(s) marked below:

- |                                                                                          |                                                                                     |
|------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| 1. <input checked="" type="checkbox"/> fee calculation sheet                             | 5. <input type="checkbox"/> statement explaining lack of signature                  |
| 2. <input type="checkbox"/> original separate power of attorney                          | 6. <input type="checkbox"/> sequence listing in electronic form                     |
| 3. <input type="checkbox"/> original general power of attorney                           | 7. <input type="checkbox"/> tables in electronic form related to a sequence listing |
| 4. <input type="checkbox"/> copy of general power of attorney; reference number, if any: | 8. <input type="checkbox"/> other ( <i>specify</i> ):                               |

**Box No. VII SIGNATURE OF APPLICANT, AGENT OR COMMON REPRESENTATIVE**

Next to each signature, indicate the name of the person signing and the capacity in which the person signs (if such capacity is not obvious from reading the demand).

KODAMA Yoshihiro



HASEBE Zentaro



For International Preliminary Examining Authority use only

1. Date of actual receipt of DEMAND:

2. Adjusted date of receipt of demand due to CORRECTIONS under Rule 60.1(b):

3. ☐ The date of receipt of the demand is AFTER the expiration of 19 months from the priority date and item 4 or 5, below, does not apply.
- ☐ The applicant has been informed accordingly.
4. ☐ The date of receipt of the demand is WITHIN the time limit of 19 months from the priority date as extended by virtue of Rule 80.5.
5. ☐ Although the date of receipt of the demand is after the expiration of 19 months from the priority date, the delay in arrival is EXCUSED pursuant to Rule 82.

6. ☐ The date of receipt of the demand is AFTER the expiration of the time limit under Rule 54bis.1(a) and item 7 or 8, below, does not apply.
7. ☐ The date of receipt of the demand is WITHIN the time limit under Rule 54bis.1(a) as extended by virtue of Rule 80.5.
8. ☐ Although the date of receipt of the demand is after the expiration of the time limit under Rule 54bis.1(a), the delay in arrival is EXCUSED pursuant to Rule 82.

For International Bureau use only

Demand received from IPEA on:

# PATENT COOPERATION TREATY

From the  
INTERNATIONAL PRELIMINARY EXAMINING AUTHORITY

To:

KODAMA Yoshihiro

Enju-Ochanomizu Bldg.3F.,17-2,Sotokanda  
2-chome,Chiyoda-ku,Tokyo 1010021 Japan

## PCT

### NOTIFICATION OF RECEIPT OF DEMAND BY COMPETENT INTERNATIONAL PRELIMINARY EXAMINING AUTHORITY

(PCT Rules 59.3(e) and 61.1(b), first sentence  
and Administrative Instructions, Section 601(a))

PCT/ JP2004 / 018109 P E 4 0 2

Date of mailing (day/month/year)

12.07.2005

Applicant's or agent's file reference

04-007PC

#### IMPORTANT NOTIFICATION

International application No.

PCT/ JP2004 / 018109

International filing date (day/month/year)

30.11.2004

Priority date (day/month/year)

02.12.2003

Applicant

BANDO CHEMICAL INDUSTRIES, LTD.

- 1 . The applicant is hereby **notified** that this International Preliminary Examining Authority considers the following date as the date of receipt of the demand for international preliminary examination of the international application:

23 . 06 . 2005

- 2 . The date of receipt is:



the actual date of receipt of the demand by this Authority (Rule 61.1(b)).



the actual date of receipt of the demand on behalf of this Authority (Rule 59.3(e)).



the date on which this Authority has, in response to the invitation to correct defects in the demand (Form PCT/IPEA/404), received the required corrections.

- 3 . ☐ **ATTENTION:** That date of receipt is **after** the expiration of 19 months from the priority date. Consequently, in respect of some Offices, the demand does not have the effect of postponing the entry into the national phase until 30 months from the priority date (or later in some Offices) (Article 39(1)) and the acts for entry into the national phase must therefore be performed within 20 months from the priority date (or later in some Offices). **However**, in respect of some other Offices, the time limit of 30 months(or later) may nevertheless apply. See the Annex to Form PCT/IB/301 and, for details about the applicable time limits, Office by Office, see the *PCT Applicant's Guide*, Volume II, National Chapters and the WIPO Internet site.



(If applicable) This notification confirms the information given by telephone, facsimile transmission or in person on:

- 4 . Only where paragraph 3 applies, a copy of this notification has been sent to the International Bureau.

Name and mailing address of the IPEA/  
JAPAN PATENT OFFICE  
4-3, KASUMIGASEKI 3 CHOME,  
CHIYODA-KU, TOKYO 100-8915 JAPAN  
TELEPHONE NO. 03-3592-1308

Authorized officer  
Commissioner  
Japan Patent Office

# PATENT COOPERATION TREATY

## PCT

### INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

(Chapter II of the Patent Cooperation Treaty)  
(PCT Article 36 and Rule 70)

Applicant's or agent's file reference 04-007PC	<b>FOR FURTHER ACTION</b>	See Form PCT/IPEA/416
International application No. PCT/JP2004/018109	International filing date (day/month/year) 30.11.2004	Priority date (day/month/year) 02.12.2003
International Patent Classification (IPC) or national classification and IPC Int.Cl. <sup>7</sup> <b>F16G1/28</b> (2006.01)		
Applicant BANDO CHEMICAL INDUSTRIES, LTD.		

1.	This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.
2.	This REPORT consists of a total of <u>3</u> sheets, including this cover sheet.
3.	This report is also accompanied by ANNEXES, comprising: <div style="margin-left: 20px;">           a. <input type="checkbox"/> a total of _____ sheets, as follows:           <div style="margin-left: 20px;"> <input type="checkbox"/> sheets of the description, claims and/or drawings which have been amended and are the basis of this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).                <input type="checkbox"/> sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.             </div> </div> <div style="margin-left: 20px;">           b. <input type="checkbox"/> a total of (indicate type and number of electronic carrier(s)) _____ containing a sequence listing and/or tables related thereto, in electronic form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).         </div>
4.	This report contains indications relating to the following items: <div style="margin-left: 20px;"> <input checked="" type="checkbox"/> Box No. I      Basis of the report  <input type="checkbox"/> Box No. II     Priority  <input type="checkbox"/> Box No. III    Non-establishment of opinion with regard to novelty, inventive step and industrial applicability  <input type="checkbox"/> Box No. IV    Lack of unity of invention  <input checked="" type="checkbox"/> Box No. V      Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement  <input type="checkbox"/> Box No. VI     Certain documents cited  <input type="checkbox"/> Box No. VII    Certain defects in the international application  <input type="checkbox"/> Box No. VIII   Certain observations on the international application           </div>

Date of submission of the demand 23.06.2005	Date of completion of this report 25.10.2005
Name and mailing address of the IPEA/JP  <b>Japan Patent Office</b> 3-4-3, Kasumigaseki, Chiyoda-ku, Tokyo 100-8915, Japan	Authorized officer <div style="border: 1px solid black; display: inline-block; padding: 2px;">3J</div> <div style="border: 1px solid black; display: inline-block; padding: 2px;">3120</div> <b>MASAYUKI TANIHANA</b> Telephone No. +81-3-3581-1101 Ext. 3328

## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/JP2004/018109

**Box No. I**      **Basis of the report**1. With regard to the **language**, this report is based on:

- ☒ the international application in the language in which it was filed
- ☐ a translation of the international application into \_\_\_\_\_, which is the language of a translation furnished for the purposes of:
- ☐ international search (Rules 12.3(a) and 23.1(b))
- ☐ publication of the international application (Rule 12.4(a))
- ☐ international preliminary examination (Rules 55.2(a) and/or 55.3(a))

2. With regard to the **elements** of the international application, this report is based on (*replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report*):

- ☒ the international application as originally filed/furnished
- ☐ the description:
- pages \_\_\_\_\_ as originally filed/furnished
- pages\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
- pages\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
- ☐ the claims:
- Nos. \_\_\_\_\_ as originally filed/furnished
- Nos.\* \_\_\_\_\_ as amended (together with any statement) under Article 19
- Nos.\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
- Nos.\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
- ☐ the drawings:
- sheets/figs \_\_\_\_\_ as originally filed/furnished
- sheets/figs \* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
- sheets/figs \* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
- ☐ a sequence listing and/or any related table(s) - see Supplemental Box Relating to Sequence Listing.

3. ☐ The amendments have resulted in the cancellation of:

- ☐ the description, pages \_\_\_\_\_
- ☐ the claims, Nos. \_\_\_\_\_
- ☐ the drawings, sheets/figs \_\_\_\_\_
- ☐ the sequence listing (*specify*): \_\_\_\_\_
- ☐ any table(s) related to sequence listing (*specify*): \_\_\_\_\_

4. ☐ This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).

- ☐ the description, pages \_\_\_\_\_
- ☐ the claims, Nos. \_\_\_\_\_
- ☐ the drawings, sheets/figs \_\_\_\_\_
- ☐ the sequence listing (*specify*): \_\_\_\_\_
- ☐ any table(s) related to sequence listing (*specify*): \_\_\_\_\_

\* If item 4 applies, some or all of those sheets may be marked "superseded."

## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/JP2004/018109

**Box No. V** Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

## 1. Statement

Novelty (N)	Claims	1-5	YES
	Claims		NO
Inventive step (IS)	Claims	1-5	YES
	Claims		NO
Industrial applicability (IA)	Claims	1-5	YES
	Claims		NO

## 2. Citations and explanations(Rule 70.7)

The subject matter of claim 1-5 is neither disclosed in any of the documents cited in the ISR nor obvious to a person skilled in the art.

# PATENT COOPERATION TREATY

From the  
INTERNATIONAL PRELIMINARY EXAMINING AUTHORITY

To:

KODAMA Yoshihiro

Enju-Ochanomizu  
Bldg. 3F., 17-2, Sotokanda  
2-chome, Chiyoda-ku, Tokyo  
1010021 Japan

## PCT

NOTIFICATION OF TRANSMITTAL OF  
INTERNATIONAL PRELIMINARY  
REPORT ON PATENTABILITY  
(Chapter II of the Patent Cooperation Treaty)  
(PCT Rule 71.1)

Date of mailing (day/month/year)	01.11.2005
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Applicant's or agent's file reference 04-007PC	<b>IMPORTANT NOTIFICATION</b>
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International application No. PCT/JP2004/018109	International filing date (day/month/year) 30.11.2004	Priority date (day/month/year) 02.12.2003
----------------------------------------------------	----------------------------------------------------------	----------------------------------------------

Applicant

BANDO CHEMICAL INDUSTRIES, LTD.

- The applicant is hereby notified that this International Preliminary Examining Authority transmits herewith the international preliminary report on patentability and its annexes, if any, established on the international application.
- A copy of the report and its annexes, if any, is being transmitted to the International Bureau for communication to all the elected Offices.
- Where required by any of the elected Offices, the International Bureau will prepare an English translation of the report (but not of any annexes) and will transmit such translation to those Offices.
- REMINDER**

The applicant must enter the national phase before each elected Office by performing certain acts (filing translations and paying national fees) within 30 months from the priority date (or later in some Offices) (Article 39(1)) (see also the reminder sent by the International Bureau with Form PCT/IB/301).

Where a translation of the international application must be furnished to an elected Office, that translation must contain a translation of any annexes to the international preliminary examination report. It is the applicant's responsibility to prepare and furnish such translation directly to each elected Office concerned.

For further details on the applicable time limits and requirements of the elected Offices, see Volume II of the *PCT Applicant's Guide*.

The applicant's attention is drawn to Article 33(5), which provides that the criteria of novelty, inventive step and Industrial applicability described in Article 33(2) to (4) merely serve the purposes of international preliminary examination and that "any Contracting State may apply additional or different criteria for the purposes of deciding whether, in that State, the claimed invention is patentable or not" (see also Article 27(5)). Such additional criteria may relate, for example, to exemptions from patentability, requirements for enabling disclosure, clarity and support for the claims.

Name and mailing address of the IPEA/JP	Authorized officer	3 J 3 1 2 0
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**Japan Patent Office**

3-4-3, Kasumigaseki, Chiyoda-ku, Tokyo 100-8915, Japan

Commissioner of the Patent Office

Telephone No. +81-3-3581-1101 Ext. 3328



## ATTENTIONS

### 1. Demand for copy of documents

Copy of the documents described in the international preliminary examination report and not described in the international search report.

An applicant can request the copy of these cited documents to the Japan Patent Office, however, National Center for Industrial Property Information and Training (Japan Patent Office building 2nd floor) handles inspection and copying of official gazettes and copying of other document etc.

[Contact and Reference]

National Center for Industrial Property Information and Training

〒100-0013

3-4-3 Kasumigaseki Chiyoda-ku Tokyo

(Japan Patent Office building 2nd floor)

(Official gazettes) Industrial Property Information Reference Department

TEL: 03-3581-1101 Ext. 3811,3812

(Others) Industrial Property Reference Materials Department

TEL: 03-3581-1101 Ext. 3831,3832,3833

Japan Patent Information Organization also services sales of the copy of these cited documents. Those who request copying of the cited documents should pay attention to the following points.

[Application Method]

(1) As for Patent (Utility Model, Design) Gazette, the following points shall be defined clearly.

- ☐ Types of patent, utility model, and design
- ☐ Fiscal year and number of publication of application or publication of unexamined application (or patent number, registration number)
- ☐ Necessary number of paper sheets

(2) As for documents except for the gazette, the following points are required attention.

- ☐ Be sure to attach the copy of the international preliminary examination report (which shall be returned).

[Application and Reference]

〒135-0016

4-1-7 Toyo Koto-ku, Tokyo

Sato Daiya Building

Foundation of Japan Patent Information Organization

Information Processing Department

Copy Service section

TEL: 03-3508-2313

Note) The period for requesting the copy of the documents to Japanese Patent Office is set to 7 years from the international application date.

2. It is necessary to submit the copy of international application (except for cases of already transmitted from the International Bureau) and its prescribed translation, and to pay the national fee. Respective countries set different periods so as to be required attention. (See Treaty Article 22, Article 39, and Article 64 (2) (a) (i))